

JEFFERSON COUNTY REMEDY LANDS

SEMI-ANNUAL REPORT

SUMMER, 1993

ENVIRONMENTAL RESTORATION PROGRAM

**U.S. DEPARTMENT OF ENERGY
Rocky Flats Plant
Golden Colorado**

JEFFERSON COUNTY REMEDY LANDS SEMI-ANNUAL REPORT - SUMMER 1993

INTRODUCTION

This report summarizes activities conducted on the Jefferson County Remedy Lands during the first half of 1993 and planned activities for the remainder of the year. Revegetation activities were conducted on the Remedy Lands during the fall of 1991 and these activities were described in previous reports to Jefferson County. Activities since the previous Remedy Lands Summer 1992 Report include monitoring of the 1991 reseeding work and contracting a weed control subcontractor. Planned activities include continued weed control and vegetation monitoring.

In addition to requirements under the Settlement Agreement, the Department of Energy (DOE) is conducting an assessment of offsite contamination as directed by the Interagency Agreement (IAG) between the Department of Energy (DOE), Environmental Protection Agency (EPA), and Colorado Department of Health (CDH). This Remedial Investigation (RI) has completed field work within the offsite area, or Operable Unit 3 (OU3) and is scheduled to complete Draft and Final RI Reports in 1994. The Jefferson County Remedy Lands are contained within OU3, and were sampled during the field work. The OU3 RI Report will assess field sampling results and determine the nature and extent of contamination as well as assess the human health risk associated with the contamination. Field sampling results from the Remedy Lands will be reported to Jefferson County as the data becomes available.

SUMMARY OF MONITORING ACTIVITIES

The success of the 1991 revegetation work was evaluated during the spring and early summer of 1992. A detailed monitoring report by Dr. Sam Bamberg was included in the Remedy Lands Summer 1992 Report. Conclusions from Dr. Bamberg's report included the following:

- New seedlings from the 1991 reseeding are evident but their abundance is highly variable across the remediated lands.
- New seedling success and growth are enhanced by the favorable growing conditions experienced during spring and early summer.
- Weed growth is also enhanced by favorable growing conditions and remains as a significant competitor to the more desirable seeded species.
- Prairie dogs are again common in most of the remediated lands.
- The desirable plant species are slowly becoming established and will predominate as a major component of the plant cover.

Observations on the Remedy Lands during the remainder of 1992 and first half of 1993 parallel the above conclusions. As expected, new seedlings are less abundant than last spring but still contribute to the overall plant cover. Growing conditions have been quite favorable during the spring and early summer of 1993, providing a dense vegetative cover over the soil surface. Weeds are still a problem as the vegetative cover contains a high percentage of undesirable weed

species. The Prairie dog population continues to grow within the Remedy Lands.

CURRENT ACTIVITIES

As identified in past reports to Jefferson County and in Dr. Bamberg's conclusions; weedy plant species continue to compete with the desirable plant species establishment. Weed competition with desirable plant species is a severe limiting factor to successful revegetation. An aggressive weed control program has been implemented to include mechanical and chemical weed suppression.

Mowing the revegetated strips is planned for later this summer and an application of a broad spectrum EPA-approved herbicide will be applied in the fall. The herbicide will be applied with a tractor-drawn sprayer at the manufacturer's recommended rate of application. The specific herbicide will be determined after evaluating the growing season.

DOE has issued a National Environmental Policy Act (NEPA) Categorical Exclusion Determination (RFO/CX033-92) for the weed control actions as defined in Section D of 10 CFR 1021. Under this Categorical Exclusion (CX) the weed control actions are removed from further NEPA review and documentation

PLANNED FUTURE ACTIVITIES

The weed control program is planned as a three year effort targeting specific weed species and their growth cycles. Mowing operations will be scheduled twice each year during the growing season to inhibit natural growth cycles and seed production. Mowing will also have a stimulating growth effect on the grass species.

Herbicide applications will be scheduled in the fall after desirable species have sufficiently matured and are not affected, in the spring before desirable plant species emerge, and at other times as needed to control persistent broadleaf infestations. Herbicide applications will be made by tractor spraying as well as spot applications where needed. The herbicide applications will depend on the growing conditions and target weed species.

Previous Jefferson County Remedy Lands Reports discussed reseeding problem areas, if necessary. Plant growth production is not as serious a limitation as weed competition due to the favorable growing conditions over the past two years. Weed control is the primary concern and will be continued before considering another reseeding effort.

As stated in earlier reports, the ability to schedule future tilling operations is limited by lack of revegetation success. The Settlement Agreement states that tilling of the alternate set of strips shall not begin until the first set is successfully reestablished in native plant species. Results of the OU3 Remedial Investigation will also be used to plan future activities on the Remedy Lands.